

REMARKS

In view of the above amendments and the following remarks, reconsideration of the outstanding office action is respectfully traversed.

Applicants continue to maintain that the previously-imposed written restriction requirement is improper for all of the reasons noted in their prior responses. It is respectfully requested that the requirement that the non-elected claims be cancelled or other appropriate action under 37 C.F.R. § 1.144 taken be held in abeyance. The provisions of 37 C.F.R. § 1.144 specifically permit deferring the filing of a petition challenging a restriction requirement until after final action. It is applicants' hope that when an interference is declared, the non-elected claims will be rejoined with the elected ones so that all interfering claims are considered in one interference proceeding.

The rejection of claims 15-24 under 35 U.S.C. § 112 (2nd para.) is respectfully traversed in view of the above amendments.

The amendments to the claims are fully supported by the disclosure of the present application. The use of capture oligonucleotides prepared as either DNA or PNA is disclosed on page 40, lines 35-37 of the present application. High specificity detection of correct signal, independent of the target sequence and under uniform hybridization conditions is disclosed on page 49, lines 16-18 of the present invention.

The rejection of claims 15 and 19-23 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 5,412,087 to McGall ("McGall '087") is respectfully traversed.

McGall '087 discloses the spacially-addressable immobilization of oligonucleotides and other biological polymers, such as proteins, on surfaces. There is no disclosure in McGall '087 of an oligonucleotide analogue array comprising a plurality of oligonucleotide analogue probes having different sequences and comprising peptide nucleotide analogues where the plurality of oligonucleotide analogue probes bind to complementary target nucleic acids at uniform hybridization conditions.

Since McGall '087 fails to teach these aspects of the claimed invention, the rejection based on this reference should be withdrawn.

The rejection of claims 15, 22, and 24 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 5,723,320 to Dehlinger et. al., ("Dehlinger") is respectfully traversed.

Dehlinger discloses a method of producing a high density, position-addressable gene array, employing an array of oligonucleotides with different sequences.

There is no disclosure in Dehlinger of an oligonucleotide analogue array comprising a plurality of oligonucleotide analogue probes having different sequences and comprising peptide nucleotide analogues where the plurality of oligonucleotide analogue probes bind to complementary target nucleic acids at uniform hybridization conditions.

Further, as the PTO acknowledges, Dehlinger is only prior art under 35 U.S.C. § 102(e) by virtue of its August 29, 1995, filing date. However, as demonstrated in the previously-submitted Showing by Applicant Under 37 C.F.R. § 1.608(b), applicants invented the subject matter of the claimed invention on or before February 4, 1994. Since this is well before the filing date of Dehlinger, that reference cannot be cited against the claims as 35 U.S.C. § 102(e) prior art.

For all of these reasons, the rejection based on Dehlinger should be withdrawn.

The rejection of claims 15-24 under 35 U.S.C. § 102(e) as anticipated by McGall '501 is respectfully traversed.

As set forth in the Request for Declaration of Interference Under 37 CFR § 1.607(a), the Showing by Applicant Under 37 CFR § 1.608(b), and the accompanying declarations, filed on January 7, 2002, applicants are seeking to provoke an interference with McGall '501 based on applicants having a date of invention preceding the effective filing date of McGall. Under these circumstances and where the claims of McGall '501 are substantially the same as those pending before the PTO in the present application, it is entirely inappropriate for a rejection under 35 U.S.C. § 102(e) to be made. For all of these reasons, the rejections based on McGall '501 should be withdrawn.

The rejection of claims 15, 17-18, 20-22, and 24 under 35 U.S.C. § 103 for obviousness U.S. Patent No. 5,700,637 to Southern ("Southern") and U.S. Patent No. 5,594,121 to Froehler, et. al., ("Froehler") is respectfully traversed.

Southern discloses an apparatus and a method for analyzing polynucleotide sequences as well as a method of generating oligonucleotide arrays. The oligonucleotides forming the array are only disclosed to be formed from conventional nucleotides. Thus, Southern fails to disclose an oligonucleotide analogue array comprising a plurality of oligonucleotide analogue probes having different sequences and comprising peptide nucleotide analogues where the plurality of oligonucleotide analogue probes bind to complementary target nucleic acids at uniform hybridization conditions, as claimed.

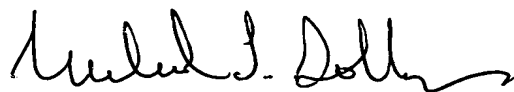
Froehler discloses oligomers containing 7-deaza-7-substituted purines or related analogs. However, Froehler fails to disclose an oligonucleotide analogue array comprising a plurality of oligonucleotide analogue probes having different sequences and comprising peptide nucleotide analogues where the plurality of oligonucleotide analogue probes bind to complementary target nucleic acids at uniform hybridization conditions, as claimed.

Since both Southern and Froehler fail to teach an important claim limitation, their combination cannot be properly used to reject the claimed invention. Accordingly, the obviousness rejection based on the combination of these references should be withdrawn.

In view of all the foregoing, it is submitted that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

Date: February 22, 2005



Michael L. Goldman
Registration No. 30,727

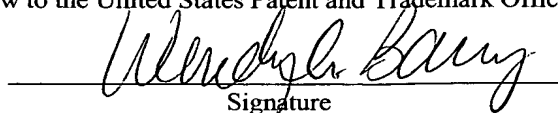
NIXON PEABODY LLP
Clinton Square, P.O. Box 31051
Rochester, New York 14603-1051
Telephone: (585) 263-1304
Facsimile: (585) 263-1600

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- ☒ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at

2/22/05
(703)
Date


Signature

Wendy L. Barry
Type or Print Name